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EXAMINER

JOHNSTONE, ADRIENNE C.

ART UNIT PAPER NUMBER

1733

DATE MAILED: 02/28/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/849,854

Applicant(s)

CHROBAK, DENNIS S.

Examiner

Adrienne C. Johnstone

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 11-21 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-19 and 22-24, drawn to a tire having a lobe-like portion at the first end of each of the sidewalls, classified in class 152, subclass 165.
  - II. Claim 20, drawn to a non-pneumatic tire designed to minimize rolling resistance while maintaining acceptable operational characteristics for a predetermined duty cycle, classified in class 152, subclass 327.
  - III. Claim 21, drawn to a method of manufacturing a tire using a homogeneous elastomeric material in a mold to produce a flat molded body having a pair of sidewalls and a cross member, classified in class 264, subclass 294.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions III and I-II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as one in which the tire is cast directly in a mold rather than conforming a flat molded body into a closed toroidal configuration.
3. Inventions I and II are distinct inventions: Invention I does not require the non-pneumatic structure of Invention II, and Invention II does not require the lobe-like projection at the first end of each of the sidewalls.

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4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. If Invention I is elected, a further election of species is required as set forth below.

6. This application contains claims directed to the following patentably distinct species of the claimed invention: a tire for mounting on a wheel rim wherein either the set of rim-engaging surfaces includes a lobe-like portion at the first end of each of the sidewalls, the respective lobe-like portions being separable when the tire is not mounted on the rim but compressed into engagement when the tire is mounted on the rim (specification paragraph 0017, Figure 1) or the set of rim-engaging surfaces includes a lobe-like portion at the first end of each of the sidewalls, the respective lobe-like portions conjoining the respective sidewalls (specification paragraph 0022, Figure 2).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 22 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

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Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

7. A telephone call was made to Scott Oldham on November 26, 2002 to request an oral election to the above restriction requirement, but did not result in an election being made.

8. Applicant's election of Group I and the species of Figure 1, claims 1-10, 22, and 23 in Paper No. 3 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

9. Claims 11-21 and 24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention or species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 3 (see paragraph 8 above).

#### *Inventorship*

10. The request to correct the inventorship of this nonprovisional application under 37 CFR 1.48(a) is deficient because:

An oath or declaration by each actual inventor or inventors listing the entire inventive entity has not been submitted.

The statement of facts by an inventor or inventors to be added or deleted does not explicitly state that the inventorship error occurred without deceptive intent on his or her part or cannot be construed to so state (in this case the statement of error without deceptive intent identifies the error as omitting correct inventor James A. Chrobak from the inventorship, while the request to change the inventorship identifies the error as including incorrect inventor "Phillip J. Chrobak"; currently this application names Dennis S. Chrobak as the sole inventor).

#### *Specification*

11. Applicant is reminded of the proper language and format for an abstract of the disclosure.

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The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

12. The abstract of the disclosure is objected to because it is more than 150 words in length.

Correction is required. See MPEP § 608.01(b).

13. The disclosure is objected to because of the following informalities: Table 2 on p. 14 of the specification does not comply with 37 CFR 1.58(c)(side margins too small).

Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

14. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

15. Claims 1-10, 22, and 23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is not an adequate description of the claim 1 and claim 22 "integral homogeneous toroidal body" (it appears from the drawings that applicant intends this language to exclude the presence of more than one tire body component, such as multiple elastomeric components or reinforcing material inside the tire body such as bead cores and cord reinforcement, but this is not adequately explained in the specification), the claim 1 and claim 22 "lobe-like projections" (since a lobe is a rounded projecting part such as the ear lobe

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on each human ear, it appears from the specification and drawings that applicant intends the "lobe-like projections" to be somewhat rounded thickened projections, but this is not adequately explained in the specification), or the claim 2 limitation that the sidewalls are "thick enough to be structurally stable" (there is no indication in the specification of what part of the sidewall is required to have this thickness or to what extent the sidewalls are required to be structurally stable).

16. Claims 1-10, 22, and 23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. See paragraph 15 above - the lack of adequate description in this case also raises the issue of lack of enablement.

17. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

18. The term "thick enough to be structurally stable" in claim 2 is a relative term which renders the claim indefinite. The term "thick enough to be structurally stable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. See paragraphs 15 and 16 above.

19. Claims 1-10, 22, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

See paragraphs 15, 16, and 18 above concerning the indefinite nature of "integral homogeneous toroidal body", "lobe-like projections", and "thick enough to be structurally stable".

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In claim 1 line 15 "lobe-like portion" should be changed to -- lobe-like projection -- for proper antecedent basis (-- the respective lobe-like projections -- in line 16) and in claim 6 line 1 "the external road-engaging surface" should be changed to -- the external surface -- (there is at least one road-engaging surface on the external surface of the cross member).

It appears from the specification paragraph 0013 that applicant intends to recite in claim 3 that the external face of the sidewalls is curved concavely -- when viewed from outside the annular chamber -- , in claim 4 that the internal face of the sidewalls is curved concavely -- when viewed from inside the annular chamber -- , and in claim 6 that the convex curvature is convex -- when viewed from outside the annular chamber -- , but this has not yet been made clear in the claims.

It appears from the specification paragraph 0016 that applicant intends to recite -- generally -- constant thickness for the cross member in claim 7, but this has not yet been made clear in the claim.

Claim 23 appears to be a duplicate of claim 1.

*Claim Rejections - 35 USC § 102*

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21. Claims 1, 2, 5-9, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Irwin (735,265) or, alternatively, Knadler (807,748).

See Irwin p. 1 line 54 - p. 3 line 3 and Figures 1-8. As to claim 5, in Figure 1 the smaller thickness of the sidewalls near the beads (lobe-like projections) at  $d^2$  is clearly depicted as falling within applicant's broad range of at least 10% smaller than the thickness of the sidewalls at the



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thickened portions d<sup>1</sup>. As to claim 7, see paragraph 19 above concerning the -- generally -- constant thickness of the cross member. As to claim 8, one of ordinary skill in the art would have understood that the tire casing D (integral homogeneous toroidal body) is formed of elastomeric material such as rubber in accordance with basic tire structure unless otherwise specified. As to claim 9, the only rubber in existence at the time this patent was granted was natural rubber, therefore one of ordinary skill in the art would have understood that the rubber forming the tire casing D was natural rubber.

Alternatively, see Knadler p. 1 line 8 - p. 2 line 33 and Figures 1 and 2. As to claim 5, the smaller thickness of the sidewalls at the concave portions 9 near the tread 7 (cross member) is clearly depicted as falling within applicant's broad range of at least 10% smaller than the thickness of the sidewalls at the convex side portions 8. As to claim 7, see paragraph 19 above concerning the -- generally -- constant thickness of the cross member. As to claim 9, the only rubber in existence at the time this patent was granted was natural rubber, therefore one of ordinary skill in the art would have understood that the vulcanized rubber or equivalent forming the elastic tire body included natural rubber.

22. Claims 1, 2, 6-10, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Seiberling (932,815) or, alternatively, Henry (2,599,176).

See Seiberling entire document. As to claim 7, see paragraph 19 above concerning the -- generally -- constant thickness of the cross member. As to claim 8, one of ordinary skill in the art would have understood that the tire casing A (integral homogeneous toroidal body) is formed of elastomeric material such as rubber in accordance with basic tire structure unless otherwise specified. As to claim 9, the only rubber in existence at the time this patent was granted was natural rubber, therefore one of ordinary skill in the art would have understood that the rubber forming the tire casing A was natural rubber. As to claim 10, the tread pattern of circumferential

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ridges and grooves on the cross member of tire casing A in Figures 1 and 2 meets applicant's definition of "circumferentially anisotropic" (specification paragraph 0014).

Alternatively, see Henry col. 1 line 43 - col. 2 line 24 and Figures 1-3. As to claim 7, see paragraph 19 above concerning the -- generally -- constant thickness of the cross member. As to claim 9, one of ordinary skill in the art would have understood that the "rubber or like resilient material" forming the tire 10 referred to natural rubber or equivalent synthetic elastomers. As to claim 10, the tread pattern of circumferential ridges and grooves on the treaded outer wall section 12 of tire 10 in Figures 1-3 meets applicant's definition of "circumferentially anisotropic" (specification paragraph 0014).

*Claim Rejections - 35 USC § 103*

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Irwin (735,265) or, alternatively, Knadler (807,748), in view of Seiberling (932,815), Henry (2,599,176), and French Patent 398.001.

Irwin and Knadler are discussed in paragraph 21 above.

It is conventional to provide a tread pattern for integral tires which includes circumferential ridges and grooves, as evidenced by Seiberling (tire casing A in Figures 1 and 2), Henry (treaded outer wall section 12 of tire 10 in Figures 1-3), and FR '001 (Figures 1 and 2) for example, which tread pattern meets applicant's definition of "circumferentially anisotropic" (specification paragraph 0014). It would therefore have been obvious to one of ordinary skill in the art to provide such a conventional tread pattern for the Irwin or Knadler tires.

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*Allowable Subject Matter*

25. Once the rejections in paragraphs 15, 16, and 19 above have been overcome, claims 3 and 4 will receive favorable consideration because the prior art of record fails to disclose or suggest the outwardly concave shape of the external face of the sidewalls from the cross member to the lobe-like projections in combination with the other features of claim 1.

*Conclusion*

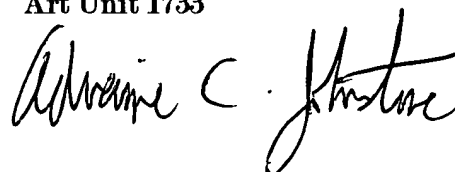
26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents anticipate or render obvious at least claim 22 but are considered at this time to be no more pertinent than the prior art already of record: Trench (596,009); Irwin (680,486); Kempshall (917,612); Daigre (1,316,773); Boyce (1,444,653); Hoopes (1,501,778); and Johnson (1,862,269).

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adrienne C. Johnstone whose telephone number is (703)308-2059. The examiner can normally be reached on Monday-Friday, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703)308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9311 for regular communications and (703)872-9310 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Adrienne C. Johnstone  
Primary Examiner  
Art Unit 1733



Adrienne Johnstone  
February 26, 2003